

**DEPARTMENT of ENVIRONMENTAL SERVICES**  
**Water Supply & Pollution Control Division - Biology Bureau**

**LAKE TROPHIC DATA**

**MORPHOMETRIC:**

Lake: ROUND POND, NORTH	Lake Area (ha): 5.26
Town: WINCHESTER	Maximum depth (m): 3.5
County: Cheshire	Mean depth (m): 2.1
River Basin: Connecticut	Volume (m <sup>3</sup> ): 107500
Latitude: 42°50'52" N	Relative depth: 1.3
Longitude: 72°27'06" W	Shore configuration: 1.00
Elevation (ft): 1050	Areal water load (m/yr): 2.20
Shore length (m): 800	Flushing rate (yr <sup>-1</sup> ): 1.10
Watershed area (ha): 24.1	P retention coeff.: 0.80
% watershed ponded: 0.0	Lake type: natural

**BIOLOGICAL:**

**18 February 1993**

**26 August 1992**

DOM. PHYTOPLANKTON (% TOTAL)	#1	DINOBYRON 90%	CHRYOSOPHAERELLA 95%
	#2		
	#3		
PHYTOPLANKTON ABUNDANCE (cells/mL)			2115
CHLOROPHYLL-A (µg/L)			8.37
DOM. ZOOPLANKTON (% TOTAL)	#1	KERATELLA 49%	KERATELLA 39%
	#2	CALANOID COPEPODS 19%	NAUPLIUS LARVA 29%
	#3	NAUPLIUS LARVA 14%	POLYARTHRA 12%
ROTIFERS/LITER		197	159
MICROCRUSTACEA/LITER		131	100
ZOOPLANKTON ABUNDANCE (#/L)		342	259
VASCULAR PLANT ABUNDANCE			Common
SECCHI DISK TRANSPARENCY (m)			3.5 Visible on bottom
BOTTOM DISSOLVED OXYGEN (mg/L)		7.6	7.9
BACTERIA (E. coli, #/100 ml)	#1		< 10
	#2		
	#3		

**SUMMER THERMAL STRATIFICATION:**

not stratified

Depth of thermocline (m): None  
Hypolimnion volume (m<sup>3</sup>) : None  
Anoxic volume (m<sup>3</sup>) : None

**CHEMICAL:**Lake: ROUND POND, NORTH  
Town: WINCHESTER

	18 February 1993		26 August 1992		
DEPTH (m)	1.5		1.0		3.0
pH (units)	5.7		6.1		6.1
A.N.C. (Alkalinity)	2.1		1.0		1.3
NITRATE NITROGEN	< 0.02		< 0.02		< 0.02
TOTAL KJELDAHL NITROGEN	0.22		0.25		0.35
TOTAL PHOSPHORUS	0.010		0.012		0.014
CONDUCTIVITY ( $\mu$ mhos/cm)	20.1		15.7		15.7
APPARENT COLOR (cpu)	20		18		21
MAGNESIUM			0.25		
CALCIUM			1.0		
SODIUM			1.2		
POTASSIUM			< 0.40		
CHLORIDE	< 3		< 3		< 3
SULFATE	4		3		4
TN : TP	22		21		25
CALCITE SATURATION INDEX			5.2		

All results in mg/L unless indicated otherwise

**TROPHIC CLASSIFICATION: 1992**

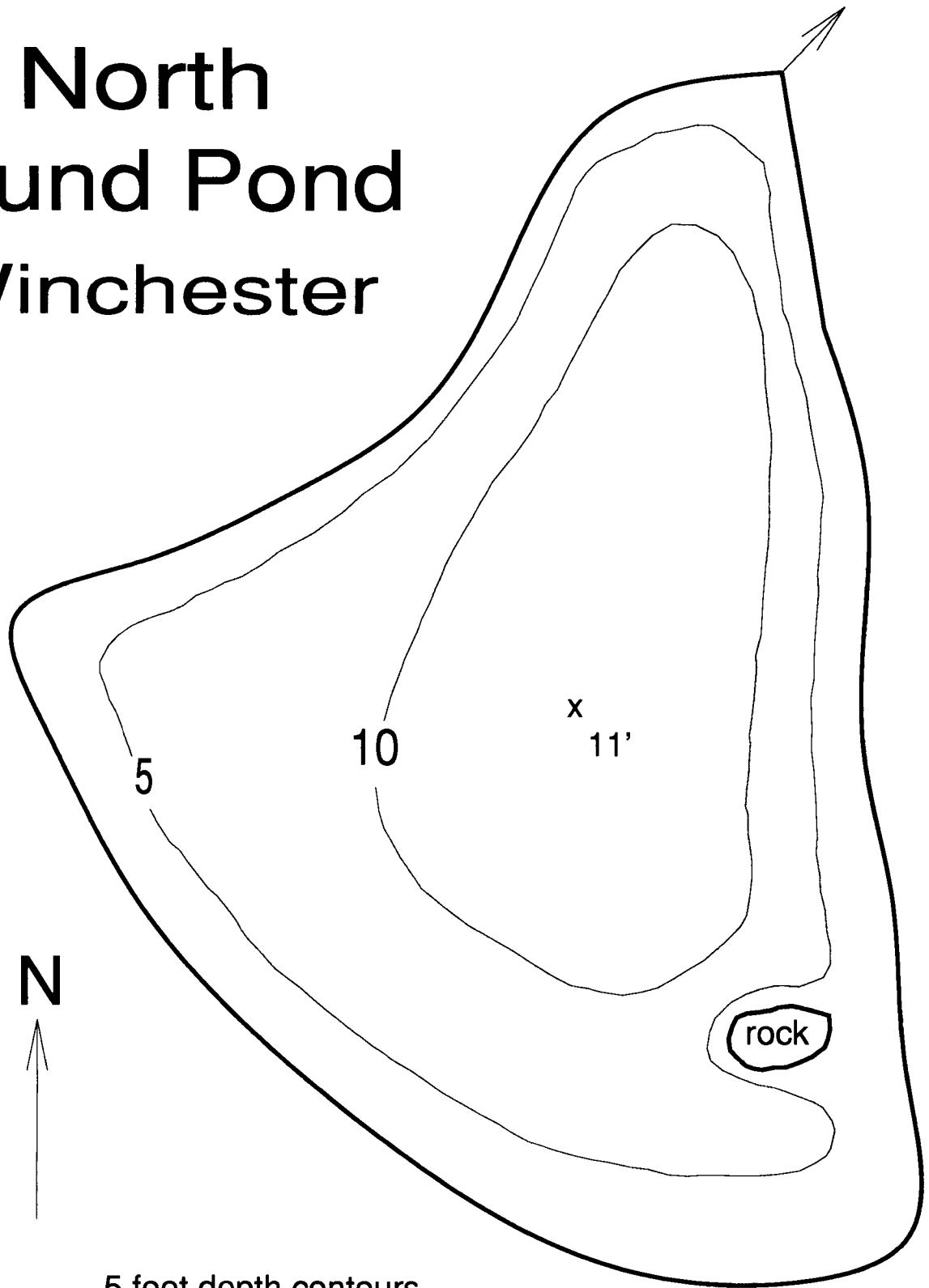
D.O. S.D. PLANT CHL TOTAL CLASS

**	2	3	2	7	Meso.
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**COMMENTS:**

1. This is a relatively remote pond located within Pisgah State Park. It was surveyed jointly with the Fish and Game Department.
2. Sometimes called Round Pond.
3. Foot access only.
4. Fish and Game netted no fish in two gill net sets.
5. Diatoms (75%) dominated the wholewater phytoplankton, with Synedra (60%) and Rhizosolenia (12%) the dominant genera.

# North Round Pond Winchester



5 foot depth contours

0 0.05



Km

[illegible]

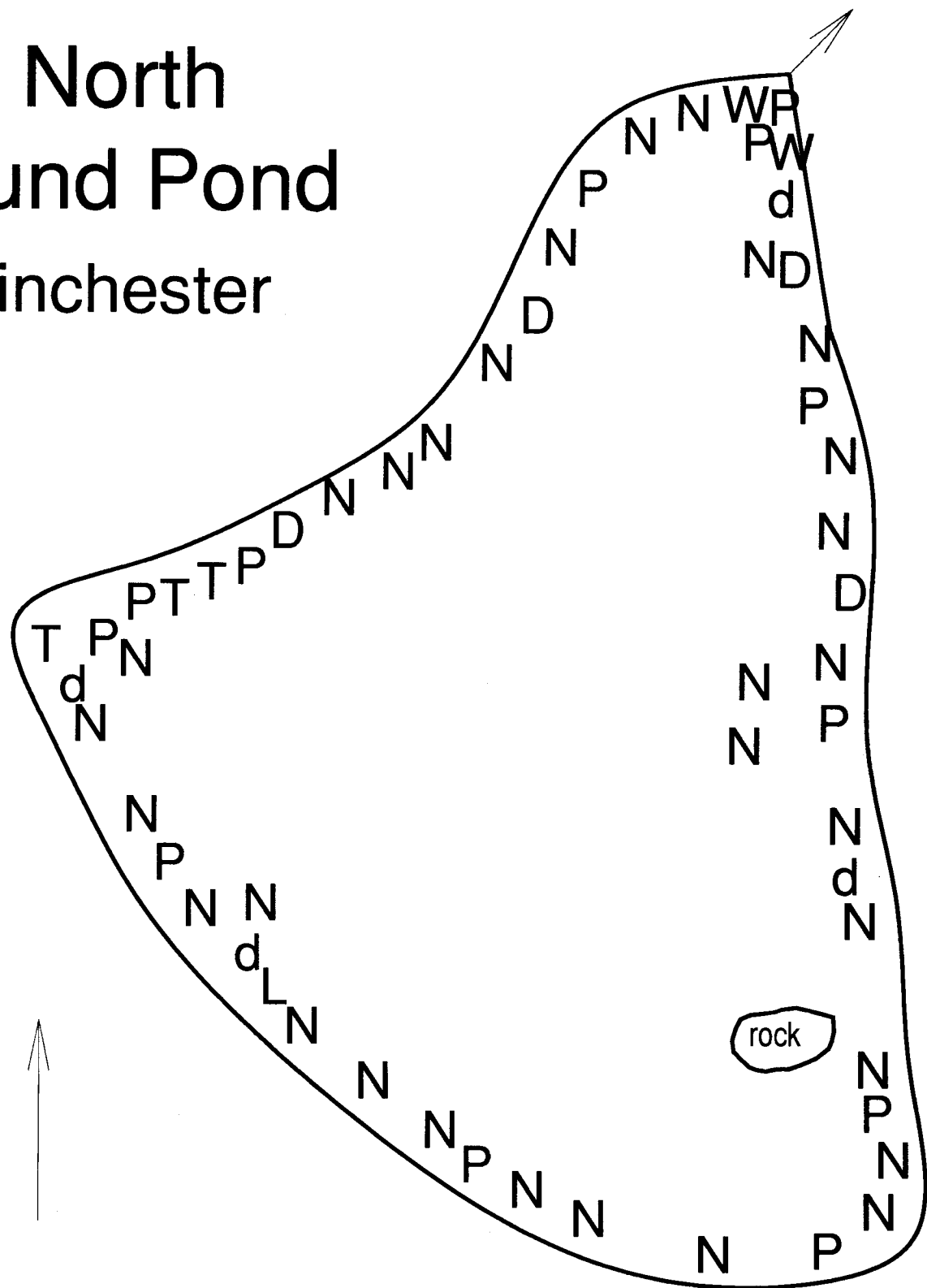
TOWN: WINCHESTER  
WEATHER: VERY HOT & HUMID

[illegible]

SECCHI DISK (m): 3.5 VOB COMMENTS:  
 BOTTOM DEPTH (m): 3.5  
 TIME: 1030

\*Dissolved oxygen values are in mg/L

# North Round Pond Winchester



0 0.05

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Km

[illegible]